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IN THE APPLICATION

OF

ANDREW D. RICE

FOR A

COVERED ANIMAL FEEDER WITH MOUNTING BRACKETS

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(703) 486-1000

COVERED ANIMAL FEEDER WITH MOUNTING BRACKETS

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

The present invention relates to animal feeders, and more particularly to a covered animal feeder with mounting brackets that mounts to a standard livestock fence and includes a hinged cover to protect animal feed contained therein from rain and snow, thereby avoiding unnecessary waste of animal feed.

2. DESCRIPTION OF THE RELATED ART

Conventional animal feeders are used to feed livestock, such as horses, cows and goats, and typically consist of open-topped bins from which animals withdraw feed. Unfortunately, a number of problems are associated with these feeders. First, and most notable, conventional animal feeders do not protect the feed contained therein from moisture. Hence, because conventional feeders include open tops, the feed contained therein becomes wet during periods of rain or snow and, once wet, often spoils and is wasted. This is especially problematic

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with alfalfa hay, a sweet tasting high-protein hay that is relatively expensive and that quickly becomes sour when wet.

Another problem associated with conventional feeders is that the feeders are not sized to receive an entire bale of hay. Therefore, time and energy must be taken to break up the bale of hay before loading it into the feeder and, further, the feeder must be loaded more often.

Additionally, conventional feeders are not accessible from outside an animal's pen, and therefore a person must enter the pen to load them. However, there are many occasions where it may not be safe or appropriate to enter an animal's pen.

Furthermore, conventional feeders cannot effectively be used to combine two types of feed, such as, for example, hay and grain. When the two are combined in one feeder, an animal typically must eat all of one type of feed to get to the other.

Examples of prior art animal feeders are provided by U.S. Pat. No. 23,386, issued March 29, 1859 to J. Packer (feed rack); U.S. Pat. No. 3,362,382, issued January 9, 1968 to M.O. Frasier (portable feeder); U.S. Pat. No. 3,853,096, issued December 10, 1974 to A.J. Whitty (small animal feeder); U.S. Pat. No. 4,976,222, issued December 12, 1990 to J.V. Cooke (horse feeder); U.S. Pat. No. 5,000,122, issued March 19, 1991 to A.L.

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Smith (horse feeder); U.S. Pat. No. 5,694,885, issued December 9, 1997 to E.A. Deitrich et al. (animal feeder with perch assembly); U.S. Pat. Publication No. 2003/0033987, published February 20, 2003; U.S. Pat. No. 6,606,962, issued August 19, 2003 to R. Elliot (horse feeder); and U.S. Design Pat. No. 392,777, issued March 24, 1998 to R.L. Scribner.

Accordingly, none of the above inventions and patents, taken either singly or in combination, is seen to describe the instant invention as claimed. Thus, a covered animal feeder with mounting brackets solving the aforementioned problems is desired.

SUMMARY OF THE INVENTION

The covered animal feeder with mounting brackets is a container configured to distribute animal feed to livestock. It has an open top, a bottom, a back wall, two sidewalls and a front wall with openings through which an animal can pull hay. It also has a hinged cover to protect feed within the container from moisture and has mounting brackets extending from the back wall that allow the container to be mounted to the top rail of a standard livestock fence.

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The hinged cover includes two sets of hinges, which allow the cover to be opened from either the front or back of the container depending on which set of hinges is used, i.e., depending on which set of hinges has hinge pins inserted therein. Thus, when mounted to a livestock fence, the container can be loaded from either the front or the back. Significantly, this allows a person to load the container from the opposite side of the fence from that on which the container is mounted and, thereby, avoid entering the area enclosed by the fence.

The container is shaped and dimensioned to receive an entire bale of hay at one time, thereby minimizing the frequency with which the container must be loaded and allowing the person loading the container to avoid the task of breaking up bales of hay.

Additionally, in an alternative embodiment, the bottom is sloped downward toward the front wall so that feed within the container will slide toward the openings in the front wall thereby providing livestock with easier access to the feed. In another alternative embodiment, a side dish is mounted to an outside surface of one of the sidewalls. With the side dish, the feeder can provide two types of feed, such as hay and grain, in an arrangement where both types can be eaten simultaneously.

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Accordingly, it is a principal object of the invention to provide an animal feeder with a hinged cover that protects feed contained therein from moisture.

It is another object of the invention to provide an animal feeder with mounted brackets that allow the feeder to be easily secured to the top rail of a standard livestock fence.

It is a further object of the invention to provide an animal feeder that is shaped and dimensioned to receive an entire bale of hay.

Still another object of the invention is to provide an animal feeder that can be easily loaded from outside a fenced area.

It is an object of the invention to provide improved elements and arrangements thereof for the purposes described which is inexpensive, dependable and fully effective in accomplishing its intended purposes.

These and other objects of the present invention will become readily apparent upon further review of the following specification and drawings.

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BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an environmental, perspective view of a covered animal feeder with mounting brackets according to the present invention.

Fig. 2 is a perspective view of a covered animal feeder with mounting brackets according to the present invention.

Fig. 3 is an exploded view of the feeder shown in Fig. 2.

Fig. 4 is a top view of a covered animal feeder with mounting brackets according to the present invention.

Fig. 5A is a side view of a covered animal feeder with mounting brackets according to the present invention.

Fig. 5B is a side view of an alternative embodiment of a covered animal feeder with mounting brackets according to the present invention.

Fig. 6 is a perspective view of a second alternative embodiment of a covered animal feeder with mounting brackets according to the present invention.

Fig. 7 is a perspective view of a side dish for the second alternative embodiment of a covered animal feeder with mounting brackets according to the present invention.

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Similar reference characters denote corresponding features consistently throughout the attached drawings.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is a covered animal feeder with mounting brackets, designated generally as **10** in the drawings, that is configured to distribute animal feed to livestock. As shown in Figs. 2 through 5A, the feeder **10** includes a box-shaped container **20** with an open top, a bottom wall **22**, a back wall **24**, two sidewalls **26** and **28** and a front wall **30** with openings **32** through which an animal can pull hay. It also has a hinged cover **50** to protect feed within the container **20** from moisture and has mounting brackets **60** extending from the outer surface of the back wall **24** that allow the container **20** to be mounted to the top rail of a standard livestock fence.

The container **20** has the shape of a rectangular box with ridges or ribs formed in the front **30**, back **24**, and sidewalls **26** and **28**. The front wall **30** has three openings **32**, each of which is substantially rectangular in shape with a width of about seven inches and is configured to allow a large animal easy access to the contents of the container **20**.

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The hinged cover **50** includes two sets of hinges, a back set **52** attached to back wall **24** and a front set **54** attached to front wall **30**(shown in Fig. 4), but only one set of hinge pins **70** (shown in Fig. 3). Thus, only one set of the hinges **52** and **54** is used at a time. The two sets of hinges **52** and **54** enable the cover **50** to be adjoined to either the front wall **30** or back wall **24**, thereby allowing the cover **50** to be opened from either the front or back of the container **20** depending on which set of hinges **52** and **54** is used, i.e., depending on which set of hinges **52** and **54** has hinge pins **70** inserted therein. Each of the hinges **52** and **54** either includes barrel segments or knuckles **38** and **58** that are formed in the front edge of the cover **50** and the top edge of the front wall **30**, or includes barrel segments or knuckles **34** and **68** that are formed in the back edge of the cover **50** and the top edge of the back wall **24**.

Each of the mounting brackets **60** has an inverted "J" shape with a proximal leg **62** and a distal leg **64**. The proximal leg **62** is secured to the back wall **24** of the container **20** by two screws **66** and has a length greater than the distance between the top rail and second rail of a standard livestock fence. The mounting brackets **60** are constructed of metal, such as aluminum, or of plastic.

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The feeder **10** includes four sets of padlock flanges, each set having an upper flange **56** and a lower flange **36** with aligned apertures dimensioned to receive the arm member of a padlock. Each upper flange **56** extends from a side edge of the cover **50** and each lower flange **36** extends from one of the sidewalls **26** and **28**. By securing a padlock to any one of the sets of padlock flanges, the cover **50** is secured to the container **20**.

When mounted to a livestock fence, as shown in Fig. 1, the container **20** can be loaded from either the front or the back, thereby allowing a person to load the container **20** from the opposite side of the fence on which the container **20** is mounted to avoid entering the area enclosed by the fence.

The container **20** is constructed of plastic, metal or rubber and is shaped and dimensioned to receive an entire bale of hay at one time, thereby minimizing the frequency in which the container **20** must be loaded and allowing a person loading the container **20** to avoid the task of breaking up bales of hay.

Additionally, in an alternative embodiment, the feeder **110**, shown in Fig. 5B, has the bottom wall **122** sloped downward toward the front wall **130** so that feed within the container will slide toward the openings in the front wall **130**, thereby providing livestock with easier access to the feed. In another

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alternative embodiment, the feeder **210**,shown in Figs. 6 and 7, has a side dish **290** mounted to one side **226** of the container by two screws **292**. With the side dish **290**, the feeder **210** can provide two types of feed, such as hay and grain, simultaneously. The side dish **290** has a bottom **298**, a back wall **294** with two apertures **288**, and an arcuate side wall **296**.

It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.

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